

REMARKS

INTRODUCTION

Claims 1-17 are pending and stand rejected.

By this Amendment claims 1-17 are amended and new claims 18-24 are amended.

Therefore, claims 1-24 are now pending and under consideration.

No new matter is being presented, and approval and entry are respectfully requested.

REJECTION OF CLAIMS 1-14 UNDER 35 U.S.C. §103(a)

In the Action at pages 2-8, item 4, claims 1-14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Pant et al. (U.S. Patent No. 6,012,053) in view of Downs et al. (U.S. Patent No. 6,070,176)

Reconsideration is respectfully requested.

Claim 1 is directed to a document display apparatus and recites:

"a plurality of electronic documents each holding, when a linked document having hyperlinks exists, ... a relative relevancy to that linked document as structure information ... the display priority of each of said plurality of electronic documents [being] based on the structure information held by each of said plurality of electronic documents, and ... determining a display method of each said electronic document based on the display priority."

According to the present invention recited in claim 1, a relevancy regarding a link relationship (hyperlink) between a plurality of electronic documents is stored as structure information, a display priority of each of the plurality of electronic documents is determined, and a display method of each electronic document is determined based on the display priority. This means, a layout and a display of the documents are determined based solely on a hyperlink structure (see claim 23), but not on a search condition or a relevancy of contents of linked documents.

Thus, in the present invention, it is not necessary to analyze contents of linked documents or to identify a relation with other document group using a search engine, because only a relation with other documents in which hyperlinks are explicitly indicated is used.

In the cited art, a relevancy between documents based on search results depends on

how the search is conducted, and a relationship between documents tends to be complicated. By contrast, in the present invention, a relationship, which exists as a hyperlink in a document, is structured and displayed, thus a new relationship between documents will not be created unexpectedly. Also, the present invention recited in claim 1 concerns a hyperlink which is a simple one-to-one and one-direction relationship. Therefore, a structure of a group of documents can uniquely be determined.

Further, the invention recited in claim 1 enables visualization of the structure of the group of documents because only hyperlink information, which is included in each document, is used to determine a display priority. Thus, the structure of the group of documents can be obtained simply by extracting the hyperlink information in the documents.

Pant et al. Reference

Pant et al. discloses that:

"results from a search query are ranked according to user-specified relevance factors to allow the user to control how the search results are presented, e.g., their order. The relevance factors are applied to the results achieved for each query. That is, each item returned by the search has a set of attributes. Each of these attributes is assigned a weight according to the specified relevance factors." (See Pant et al. at column 1, lines 54-60.)

This means that in Pant, a user specifies a relevance factor when searching with a search engine, and weighting is performed based upon whether or not an attribute of a subject of the search matches the relevance factor, and a display priority and a ranking of search results are performed based on the search results.

Further, Pant et al. discloses that structured documents such as SGML and HTML are analyzed, and that a relevancy between a term included in a tag and search term are determined. For example, if a search term appears inside a TITLE tag, a greater relevance weighting is given and a display priority is determined based on, a tag in which a predetermined term is included. (See Pant et al. at column 6, lines 40-50.)

A document displaying method disclosed in Pant analyzes the relevancy between the documents included in search results and a search term, and determines the display priority.

Therefore, the present invention recited in claim 1 patentably distinguishes over Pant et al. in that the present invention recited in claim 1 determines a display priority based on a link

relationship (i.e., a hyperlink relationship) between documents. This is because, in the Pant et al. system, the display priority is base on a relevancy of search terms.

More particularly, in Pant et al., the relationship between documents is obtained from search results and the relationship does not indicate a relationship based on a hyperlink structure which is included in a document.

Downs et al. Reference

Downs et al. discloses "a technique for representing a portion of the Web as a visual map which graphically indicates the relevance of particular Web documents to a user's search criteria." (See Downs et al. at column 4, lines 52-55.)

In the Downs method, a document is displayed in a three-dimensional graphics based on a relevancy thereof. A document with a high relevancy is displayed in a middle of a display or closer to a user, and a document with a lower relevancy than that of the high relevancy document is displayed further from the user. If a hyperlink relationship between documents exists, arrows show hypertext links between documents. (See Downs et al. at Fig. 4.) However, a display priority in Downs et al. is based on search criteria (i.e., search terms) and a relevancy thereof in a document. Contrary to that of the present invention recited in claim 1, the Downs et al. method is not based on a link relationship (i.e., the hyperlink relationship) between documents.

More particularly, in Downs et al., the relationship between documents is obtained from search results and the relationship does not indicate a relationship based on a hyperlink structure which is included in a document. The Downs et al. method merely indicates hyperlinks with arrows, but otherwise is used to supplement a display of search results and therefore, cannot visualize a hyperlink structure.

The cited art does not disclose or suggest either taken singularly or in any proper combination the above-mentioned recitation in claim 1, and is submitted to be allowable.

Claim 9 for similar reasons to those of claim 1, is also submitted to be allowable

Claims 2-8 and 10-14, which depend from claims 1 and 9, are also submitted to be allowable for at least the same reasons as those of claims 1 and 9, as well as for the additional recitations therein.

REJECTION OF CLAIMS 15-17 UNDER 35 U.S.C. §103(a)

In the Action at pages 2-8, item 4, claims 1-14 are rejected under 35 U.S.C. §103(a) as being unpatentable over Pant et al. (U.S. Patent No. 6,012,053) in view of Downs et al. (U.S. Patent No. 6,070,176)

Claim 15

Claim 15, as now amended, is directed to a document display method and recites determining a display priority based on a relevancy between each of the electronic documents

Stoub Reference

In the Stoub method a displayed area on a screen is controlled to convert a scrollable display to a non-scrollable display. (See Stoub at column 3, lines 54-61.) Nothing in Stoub discloses or suggests "determining a display priority based on a relevancy between each of the electronic documents."

Accordingly, claim 15 is submitted to patentably distinguish over the cited art and should be allowable.

Claim 17 for similar reasons to those of claim 15, is also submitted to be allowable

Claim 16, which depends from claim 15, is also submitted to be allowable for at least the same reasons as those of claim 15, as well as for the additional recitations therein.

NEW CLAIMS 18-24

New claims 18 to 24 are provided to afford a varying scope of protection and are submitted to be allowable for similar reasons to those of claims 1 and 15.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is respectfully solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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